

WHAT IS CLAIMED IS:

1. A mechanical device, comprising: a box-like body; an intermediate element; oscillation compensation means that interact with said single plate to compensate oscillation thereof; a single plate having a first seat, that is connectable under a chair having a central column; an actuation rod transversely connectable with said single plate for combined rotation and translational motion of said intermediate element that is pivoted inside said box-like body partially accommodated at said first seat formed below said single plate, said box-like body being connectable to said central column and interacting with said oscillation compensation means.
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2. A mechanical device, comprising: a box-like body; an intermediate element; oscillation compensation means that interact with said single plate to compensate oscillation thereof; a single plate having a first seat, that is connectable under a chair having a central column; an actuation rod transversely connectable with said single plate for combined rotation and translational motion of said intermediate element that is pivoted inside said box-like body partially accommodated at said first seat formed below said single plate, said box-like body being connectable to said central column and interacting with said oscillation compensation means, and wherein a
15 bayonet-type coupling is further provided between said oscillation compensation means and said single plate.
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3. The mechanical device of claim 1, wherein said first seat is shaped complementarily to said box-like body and is formed by a ridge that protrudes, in use, perimetricaly downward from said single plate.
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4. The mechanical device of claim 3, wherein said ridge is substantially oval in plan view, and triangular with rounded corners in transverse cross-section.
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5. The mechanical device of claim 3, wherein said box-like body comprises a base that is substantially flat and oval and a hollow connecting stem for connection to said central column, said connecting stem protruding,

in use, downwardly in an off-center position of said single plate.

6. The mechanical device of claim 5, further comprising: a lateral edge that protrudes perimetrically vertically from said base of said box-like body and is directed, in use, upwardly; two first supporting holes formed 5 transversely to said edge; and a transverse pivot mounted at said first supporting hole for mutually pivoting said box-like body and said single plate.

7. The mechanical device of claim 6, wherein said two first holes face each other and are formed in said lateral edge along an axis that is 10 perpendicular to an axis of said stem and to a longitudinal central axis of said box-like body, and are provided with two supporting bushes for said transverse pivot.

8. The mechanical device of claim 7, further comprising pairs of second holes formed in said ridge of said single plate, along a common axis with 15 said pivot, the free ends of said pivot protruding externally to said bushes, so as to be accommodated in said pairs of second holes.

9. The mechanical device of claim 8, wherein said actuation rod comprises a first portion and a second portion, which are substantially straight, lie on a same axis, and are connected to each other by a third C-shaped portion, said third portion being accommodated inside said box-like 20 body, so as to interact with said intermediate element.

10. The mechanical device of claim 9, comprising third holes formed in said box-like body along an axis parallel to the axis of said pivot, on an opposite side with respect to said stem, said first and second portions passing 25 through said two third holes, and said single plate comprising first and second recesses or flattened portions, formed in said ridge, for accommodating said first and second portions.

11. The mechanical device of claim 10, wherein the first recess or flattened portion is deeper than the second recess or flattened portion, so as 30 to allow free oscillation of said single plate with respect to said box-like

body.

12. The mechanical device of claim 11, wherein said second recess or flattened portion is shallow, such as to ensure temporary oscillation locking of said box-like body and said single plate when said first portion is 5 accommodated in said second recess or flattened portion.

13. The mechanical device of claim 10, wherein said intermediate element has, in plan view, a substantially triangular shape that forms a base side, which is arranged at said transverse pivot parallel to the axis of the transverse pivot, and a vertex, said vertex lying opposite said base side and 10 being directed toward said third C-shaped portion of said actuation rod.

14. The mechanical device of claim 13, wherein said intermediate element has a fourth through hole that is formed parallel to said base side and proximate thereto in order to partially and rotatably accommodate said transverse pivot.

15. The mechanical device of claim 14, wherein said intermediate element has, proximate to said vertex thereof, a transverse slot that is parallel to the axis of said transverse pivot in order to partially and rotatably accommodate said third portion of said actuation rod.

16. The mechanical device of claim 15, comprising a gas-filled cylinder 20 accommodated in said central column, rotation of said actuation rod about the axis of said first and second rod portions producing rotation of said intermediate element about said transverse pivot, so as to actuate said gas-filled cylinder.

17. The mechanical device of claim 16, comprising: a preset protrusion 25 which protrudes downward from said intermediate element; a button that protrudes above said gas-filled cylinder; and a knob associated with an end of said actuation rod that is liftable so as to rotate downwards said vertex of said intermediate element and to force contact between a preset protrusion.

18. The mechanical device of claim 1, wherein said compensation means 30 comprise a first half-shell and a second half-shell, which are mutually

connectable so as to form an ovoid enclosure for an elastically deformable element, formed by a spring, and by a tension element arranged coaxial to said spring, said enclosure accommodating said elastically deformable element for interconnecting said first lower half-shell and said single plate,
5 said tension element comprising a threaded end, a complementarily threaded nut connectable to said threaded end and with said first half-shell, and a head that is T-shaped and protrudes above said single plate.

19. The mechanical device of claim 18, wherein said tension element comprises a stem that is arranged so as to pass through a sixth hole, which is
10 formed above said second half-shell, and said head is arranged so as to pass within a first slot formed in said base of said box-like body.

20. The mechanical device of claim 19, wherein said head of said tension element is arranged so as to pass through a second slot, which is similar to said first slot and is formed along a same axis with said first slot within said
15 single plate.

21. The mechanical device of claim 20, wherein said first and second slots are arranged along said same axis thereof, which is parallel to the longitudinal central axis of said box-like body.

22. The mechanical device of claim 21, wherein said first and second
20 slots are longer than a transverse arm of said T-shaped head of said tension element, in order to allow passage therethrough of said head.

23. The mechanical device of claim 22, wherein said single plate has, on an upper surface thereof, a third longitudinal seat that is formed along a transverse direction with respect to said second slot, in order to accommodate
25 said T-shaped head of said tension element, and to allow nonrotating bayonet-type coupling between said tension element and said single plate.

24. The mechanical device of claim 2, wherein said oscillation compensation means are connectable with said single plate after assembly of
30 said oscillation compensation means.

25. The mechanical device of claim 23, comprising a bridge that protrudes, in use, upwardly and constitutes a stroke limiting element for said tension element, said second slot being provided by cut through said single plate and deformed locally to form said bridge.

5 26. The mechanical device of claim 1, wherein said box-like body and said single plate are press shaped in a single sheet of metal.

27. The mechanical device of claim 23, further comprising additional locking means for locking said single plate by interference, said additional locking means being constituted by an L-shaped lever or latch that

10 comprises a first wing and a second wing that lie on the same plane and have, in a connecting region thereof, a locking pivot that is press shaped and protrudes at least below said lever or latch, for providing pivoting of said lever or latch to said box-like body, said locking pivot being accommodated at a seat formed in said base of said box-like body in a region that is adjacent to said third hole on an opposite side with respect to said first slot.

15 28. The device of claim 27, wherein a free end of said first wing is arranged, in use and when inactive, transversely to said box-like body, and has a tooth directed, with said additional interference locking means in a not activated configuration, along an axis that is longitudinal to said box-like body, and said second wing having a protrusion that projects at a free end thereof along a plane that is perpendicular to said second wing and arrangeable at an eighth hole formed at said overlying intermediate element.

20 29. The device of claim 28, comprising a milling formed on said lateral edge and at said tooth, said tooth facing said adjacent lateral edge of said box-like body, and said milling allowing free sliding therein of said tooth until the tooth protrudes outside said lateral edge.

25 30. The device of claim 29, comprising an abutment provided at said single plate, a movement of said rod that places said first portion of said rod within said second flattened portion being matched by a rotation imparted to said latch or lever, with the consequent arrangement of said tooth beyond

said milling so as to engage at said abutment to further lock movement of the rod.